



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/538,730	06/13/2005	Olivier Guerret	FR-AM1907 NP	6786
31684	7590	09/30/2010	EXAMINER	
ARKEMA INC. PATENT DEPARTMENT - 26TH FLOOR 2000 MARKET STREET PHILADELPHIA, PA 19103-3222			BERNSHTEYN, MICHAEL	
			ART UNIT	PAPER NUMBER
			1796	
			NOTIFICATION DATE	DELIVERY MODE
			09/30/2010	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

carol.hill@arkema.com
steven.boyd@arkema.com
thomas.roland@arkema.com

Office Action Summary	Application No. 10/538,730	Applicant(s) GUERRET, OLIVIER	
	Examiner MICHAEL M. BERNSHTEYN	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 01 September 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,7,9-11,13 and 17-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,7,9-11,13 and 17-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action follows a response filed on October 21, 2009. Claims 1 and 7 have been amended; no claims have been cancelled or added.
2. In view of the amendment(s) and remarks the objection of the specification and the rejection of claims 1, 2, 4, 7, 9, 10, 13 and 17-21 under 35 U.S.C. 112, first paragraph have been withdrawn. However, upon further consideration, a new ground(s) of rejection is made.
3. Claims 1, 2, 4, 7, 9-11, 13 and 17-21 are pending.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 7, 9, 10 and 20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 7 (the last four lines) contains the following limitations: "and wherein the hydrophilic monomer(s) in the copolymer, if from group M₁ is selected from the group consisting of polyethylene glycol acrylate and polyethylene glycol methacrylate, and if

Art Unit: 1796

the hydrophilic monomer is from M₂ it is selected from the group consisting of acrylic acid and methacrylic acid.”

It is noted that there are no specific groups of hydrophilic monomers M₁ and M₂ in the disclosure, and the only example of the group M₁ contains both hydrophilic and hydrophobic monomers (see page 6, lines 23-32).

Therefore, any analysis of whether a particular claim is supported by the disclosure in an application requires a determination of whether that disclosure, when filed, contained sufficient information regarding the subject matter of the claims as to enable one skilled in the pertinent art to make and use the claimed invention. The standard for determining whether the specification meets the enablement requirement was cast in the Supreme Court decision of *Mineral Separation v. Hyde*, 242 U.S. 261, 270 (1916) which postured the question: is the experimentation needed to practice the invention undue or unreasonable? That standard is still the one to be applied. *In re Wands*, 858 F.2d 731, 737, 8 USPQ2d 1400, 1404 (Fed. Cir. 1988). Accordingly, even though the statute does not use the term “undue experimentation,” it has been interpreted to require that the claimed invention be enabled so that any person skilled in the art can make and use the invention without undue experimentation. *In re Wands*, 858 F.2d at 737, 8 USPQ2d at 1404 (Fed. Cir. 1988). (MPEP 2164.01 [R-5]).

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 1796

5. Claims 1, 2, 4, 9-11, 13 and 17-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Newly amended claim 1 recites the limitation "...wherein the monomer M_1 is selected from the group of monomers consisting of: linear or branched C_1 - C_{12} alkyl acrylates, **polyethylene glycol acrylate, polyethylene glycol methacrylate**, dienes, butadiene and isoprene; and monomer M_2 is one or more monomers selected from the group consisting of styrene, styrene derivatives, (meth)acrylic monomers, acrylic acid, methacrylic acid, norbornyl acrylate, methyl methacrylate, acrylonitrile and methacrylonitrile; and wherein the hydrophilic monomer(s) is selected from the group consisting of polyethylene glycol acrylate, polyethylene glycol methacrylate, **acrylic acid and methacrylic acid.**"

Therefore, the difference between monomers M_1 , M_2 and the hydrophilic monomers is not clear because polyethylene glycol acrylate and polyethylene glycol methacrylate now belong to both monomers M_1 and the hydrophilic monomers while acrylic acid and methacrylic acid belong to both monomers M_2 and the hydrophilic monomers.

Claim 7 recites the limitation "...wherein said hydrophilic monomer is selected from the group consisting of ethylenic carboxylic acids, acrylic acid, methacrylic acid, itaconic acid, fumaric acid; and acrylates and methacrylates of polyethylene glycol or of glycol which are or are not substituted on their end functional group by alkyl, phosphate, phosphonate or sulfonate groups; wherein the monomer M_1 is selected from the group

Art Unit: 1796

of monomers consisting of: linear or branched C₁-C₁₂ alkyl acrylates, polyethylene glycol acrylate, polyethylene glycol (meth)acrylate, dienes, butadiene and isoprene; and wherein M₂ is selected from one or more monomers selected from the group consisting of styrene, styrene derivatives, (meth)acrylic monomers, norbornyl acrylate, methyl methacrylate, acrylonitrile and methacrylonitrile.”

It seems that the second part of claims 1 and 7 contradict the first part of the claims because of the following. The above mentioned second part of claims 1 and 7 recite the species of monomers M₁ and M₂ which are not hydrophilic but hydrophobic, such as linear or branched C₁-C₁₂ alkyl acrylates, dienes, butadiene and isoprene for M₁ and styrene derivatives, norbornyl acrylate, methyl methacrylate, acrylonitrile and methacrylonitrile for M₂. Therefore none of M₁ and M₂ is a hydrophilic monomer while the first part of claims 1 (line 7) and 7 (line 9) contains the limitation “at least one of the monomers being hydrophilic”, which means that either M₁ or M₂ is hydrophilic, while newly amended specification does not disclose that acrylic acid and methacrylic acid belong to M₁ or M₂.

6. Claim 11 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims, for rationale recited in paragraph 17 of Office Action dated September 8, 2008.

Response to Arguments

7. Applicant's arguments filed on September 1, 2010 have been fully considered but they are not persuasive.

8. It appears that the focal Applicants argument resides in the contention that newly amended claims 1 and 7 cite that the hydrophilic monomers, if from group M1 or M2 are selected from specific groups of monomers. The examiner notes that there are no specific groups of hydrophilic monomers identified as being from groups M₁ or M₂ in the disclosure. Applicant has amended the specification to cite the "other monomer" as being M₂, and to specifically name acrylic acid and methacrylic acid as part of the other monomers (pages 10-11).

9. It is noted that claim 7 has not been amended according the record dated September 1, 2010, and the amended specification still does not disclose acrylic acid and methacrylic acid as part of the other monomers M₂ (see amendments on page 6, lines 27-32). Therefore the above mentioned rejections of the claims under 35 U.S.C. 112, first paragraph and under 35 U.S.C. 112, second paragraph remain in force.

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

Art Unit: 1796

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL M. BERNSHTEYN whose telephone number is (571)272-2411. The examiner can normally be reached on M-Th 8-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on 571-272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1796

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael M. Bernshteyn/
Examiner, Art Unit 1796

/M. M. B./
Examiner, Art Unit 1796